



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,087	12/31/2003	Michael Thomas Spoltore	H0006017-0555	1901

7590 01/03/2006  
HONEYWELL INTERNATIONAL, INC.  
LAW DEPARTMENT  
101 COLUMBIA ROAD  
MORRISTOWN, NJ 07692

EXAMINER

NGUYEN, HUNG T

ART UNIT PAPER NUMBER

2636

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,087

Applicant(s)

SPOLTORE ET AL.

Examiner

HUNG T. NGUYEN

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 40-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 40-43, 48, 51, 54, 56-57, 59-62, 65, 67-68, 70-71 & 73-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596).

Regarding claim 40, McKay discloses a system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs. 1-2,4, paragraphs 0013-0014, 0017 ] comprising:

- means for detecting presence of personnel / firefighters (14) within a protected premises (12) at a real time [ figs.1-2,4, paragraphs 0012-0014, 0017 ];
- remote receiver (48) includes a computer system (44,84) having memory device is inherently for storing the firefighter signals is cited in figs.2,4,6, paragraphs 0014, 0017, 0019.
- a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring

Art Unit: 2636

condition of firefighter in three positioning (32,33,34) at a real time period [ figs.1-2,6, paragraphs 0014, 0019, 0022 ].

- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time [ figs.1-2,4, paragraphs 0013-0014, 0017 ].

The reference of McKay does not specifically mention exactly a term as subsequently detecting as claimed by the applicant.

However, Kulesz teaches a communication network system which can be employed by fire department, police, or emergencies rescue team to response as detecting (20,61-65) of hazardous events as high temperature, chemical, biological, nuclear, explosive, dirty bomb (72), earthquake and so on wherein the hazardous material is detected to a subsequent, different location is monitored by a controller (70) [ figs.3-4, col.5, lines 39-52 and col.7, line 62 to col.8, line 33 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kulesz in the system of McKay for detecting & monitoring subsequent fire, subsequent earthquake, subsequent bomb conditions.

Regarding claims 41-43, McKay discloses the system for providing assistance to emergency personnel (14) / a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in

Art Unit: 2636

three positioning (32,33,34) at a real time period [ figs.1-2,6, paragraphs 0014, 0017, 0019, 0022 ].

Regarding claims 48 & 54, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Regarding claim 51, McKay discloses the system for providing assistance to emergency personnel (14) / a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [ figs. 1-2,4,6, paragraphs 0014, 0017 0019, 0022 ].

Regarding claims 56-57, McKay discloses the system for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs.1-2, paragraphs 0013-0014 ] comprising:

- means for detecting the presence of personnel / firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal / GPS receiver [ figs. 1-2, paragraphs 0012-0014 ];
- means for displaying by a computer monitor (46,82) as showing the presence of the firefighters (14) within a protected promises at a real time which having a circuit

Art Unit: 2636

component / microprocessor in the computer system (44) is inherently [ figs. 1-2,4, 6, paragraphs 0013-0014, 0017 ].

Regarding claims 59 & 70, McKay discloses the system (30) is installed in an emergency fire truck (18) which to monitor the firefighters (14) in the building (12) is on fire condition by a remote signal [ figs.1-2,5, paragraphs 0013-0014 and 0018 ];

- means for detecting the presence of personnel / firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal / GPS receiver [ figs. 1-2, paragraphs 0012-0014 and 0018 ];
- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time from the emergency tire truck [ figs. 1-2,4, paragraphs 0013-0014, 0017 ].

Regarding claim 60, McKay discloses the system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs. 1-2, paragraphs 0013-0014, 0017 ] comprising:

- means for detecting the presence of personnel / firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal / GPS receiver [ figs. 1-2, paragraphs 0012-0014 and 0018 ];
- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time from the emergency tire truck [ figs.1-2,4, paragraphs 0013-0014, 0017 ].

Art Unit: 2636

- the system for providing assistance to emergency personnel (14) / a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [ figs. 1-2,6, paragraphs 0014, 0017 0019, 0022 ].

Regarding claims 61-62, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ];

- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time from the emergency fire truck [ figs.1-2, 4, paragraphs 0013-0014, 0017 ].

- the system for providing assistance to emergency personnel (14) / a building (12) is on fire condition from a fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [ figs. 1-2,6, paragraphs 0014, 0017, 0019, 0022 ].

Regarding claim 65, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on

Art Unit: 2636

may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Regarding claims 67-68, McKay discloses the system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs. 1-2,4, paragraphs 00 13-0014, 0017 ] comprising:

- means for detecting the presence of personnel / firefighters (14) having a tag (16,40) within a protected promises (12) at a real time by a wireless signal / GPS receiver [ figs. 1-2, paragraphs 0012-0014 and 0018 ];
- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time from the emergency fire truck, the receiver (48) which having a circuit component / microprocessor in the computer system (44,84) is inherently [ figs. 1-2,4, 6, paragraphs 0013-0014, 0017 ].

Regarding claim 71, McKay discloses the system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs.1-2,4, paragraphs 0013-0014, 0017 ] comprising:

- means for detecting presence of personnel / firefighters (14) within a protected promises (12) at a real time [ figs. 1-2,4, paragraphs 0012-0014, 0017 ];
- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected promises at a real time [ figs. 1-2,4, paragraphs 0013-0014,0017 ];



Art Unit: 2636

- the computer monitor (46,82) is connected to input device / keypad / console (42) from the computer system is inherently (44,84) [ figs. 1-2, 4, paragraphs 0013-0014, 0017 ].

Regarding claim 73, McKay discloses the system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs.1-2,4, paragraphs 0013-0014, 0017 ] comprising:

- means for detecting presence of personnel / firefighters (14) within a protected premises (12) at a real time [ figs. 1-2,4, paragraphs 0012-0014, 0017 ];
- means for displaying by a computer monitor (46,82) as showing the presence of the firefighters (14) within a protected premises at a real time [ figs. 1-2,4, paragraphs 0013-0014,0017 ].

Regarding claims 74-76 & 78, McKay disclose the method for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs. 1-2,4, paragraphs 0013-0014, 0017 ] comprising:

- remote receiver (48) includes a computer system (44,84) having memory device is inherently for storing the firefighter signals is cited in figs.2,4,6, paragraphs 0014, 0017, 0019.
- the fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring

Art Unit: 2636

condition of firefighter in three positioning (32,33,34) at a real time period [ figs.1-2,6, paragraphs 0014, 0019, 0022 ].

Regarding claim 77, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

3. Claims 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further view of Wiemeyer (U.S. 5,726,633).

Regarding claims 44-45, The references of McKay & Kulesz do not specifically mention the detector includes ionization or photoelectric as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Furthermore, Wiemeyer teaches smoke detector having ionization and photoelectric detectors for discrimination of fire types [ col.1, lines 25-30 and line 40 to col.2, line 3 ].

Art Unit: 2636

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Wiemeyer in the system of McKay for detecting fire condition which take into account the characteristic of different types of fires.

Regarding claims 46-47, Wiemeyer teaches the smoke detector having ionization and photoelectric detectors for discrimination of fire types also mentions a function of fuzzy logic and Boolean logic for signal processing of outputs of tire or smoke sensors as improved performance [ col.1, lines 25-54 ].

4. Claims 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Addy (U.S. 6,084,522).

Regarding claims 49-50, The references of McKay & Kulesz do not specifically mention the detector includes thermistors as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Furthermore, Addy teaches temperature sensing wireless smoke detector by using thermistor device (T1) for monitoring the temperature level [ fig.1, col.2, lines 45-52 and col.4, lines 31-32 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the teaching of Kulesz & Addy in the system of McKay for detecting & monitoring the high temperature level in the fire building.

5. Claims 52-53 & 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Hackett (U.S. 4,035,798).

Regarding claims 52-53 & 63-64, The references of McKay & Kulesz do not specifically mention the detector includes ultrasonic and microwave as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Furthermore, Hackett teaches a frequency of ultrasonic or microwave can be used in the detection system in the protected premises or building as desired [ fig.1, col. 1, lines 56-63 and abstract ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kulesz & Hackett includes a frequency of ultrasonic or microwave in the system of McKay for detecting person or object in the fire building.

6. Claims 55 & 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Katz et al. (U.S. 6,188,318).

Regarding claims 55 & 66, The references of McKay & Kulesz do not specifically mention the detector includes both passive infrared and microwave sensors as claimed by the applicant.

However, McKay does teach the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

Furthermore, Katz teaches a dual-sensing intrusion detection device which may includes both passive infrared or microwave sensors can be used in the detection system in the protected premises or building as desired [ fig.1, col.4, lines 48-60, col.5, lines 24-50 and abstract ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Katz in the system of McKay for sensing person & object in the fire building by at least two frequency signals.

7. Claims 58, 69 & 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay Patent Application Publication (U.S. 2001/0036832) in view of Kulesz et al. (U.S. 6,930,596) and further in view of Lepkofker et al. Patent Application Publication (U.S. 2004/0021569).

Regarding claims 58 & 69, The references of McKay & Kulesz do not specifically mention the detector includes the display device for displaying the fire fighters on floor plan on the location are defined.

However, McKay does teach the system is used for fire department may detect the presence of personnel / firefighters (14) within a protected premises (12) at a real time [ figs. 1-2, 4, paragraphs 0012-0014, 0017 ];

- means for displaying by a computer monitor (46,82) the presence of the firefighters (14) within a protected premises at a real time [ figs. 1-2,4, paragraphs 0013-0014, 0017 ].

Furthermore, Lepkofker teaches a rescue system for tracking persons or things which can be used by the firefighters includes a display device which could display the

Art Unit: 2636

firefighters (25) in any locations in the building includes floor plan or hallway location [ paragraphs 0036, 0051-0053 ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Lepkofker in the system of McKay for detecting & displaying the firefighters in any location building.

Regarding claim 72, McKay disclose a system (30) for providing assistance to emergency personnel (14) / a building (12) is on fire condition [ figs.1-2,4, paragraphs 0013-0014, 0017 ] comprising:

- means for detecting presence of personnel / firefighters (14) within a protected promises (12) at a real time [ figs. 1-2,4, paragraphs 0012-0014, 0017 ];
- means for displaying by a computer monitor (46,82) as showing the presence of the firefighters (14) within a protected promises at a real time [ figs. 1-2,4, paragraphs 0013-0014,0017 ];
- remote receiver (48) includes a computer system (44,84) having memory device is inherently for storing the firefighter signals is cited in figs.2,4,6, paragraphs 0014, 0017, 0019.
- the fire truck having a server (128) comprising a memory device for storing data information as each of the firefighter (14) having a tag (16,40) is attached for monitoring condition of firefighter in three positioning (32,33,34) at a real time period [ figs.1-2,6, paragraphs 0014, 0019, 0022 ];

Art Unit: 2636

- the system is used for fire department could be included various environmental sensor as temperature, infrared, oxygen, gas or so on may connect to wearable computer (102) for firefighter to detecting the condition in the fire building (12) [ fig.5, paragraph 0018 ].

The reference of McKay & Kulesz do not specifically mention the detector includes the display device for displaying the fire fighters on floor plan on the location are defined.

Furthermore, Lepkofker teaches a rescue system for tracking persons or things which can be used by firefighters includes a display device which could display firefighters (25) in any locations in the building includes floor plan or hallway location [ paragraphs 0036, 0051-0053 ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kulesz & Lepkofker in the system of McKay for showing & displaying the firefighters in any location building.

### Arguments & Responses

8. Applicant's argument filed on Nov. 09, 2005 includes new claims 40-78 have been fully considered but they are moot in view of the new ground(s) of rejection.



Art Unit: 2636

In the Remarks:

9. Applicant remarks that references as Wiemeye, Addy, Hackett, Katz and Lepkofker can not be combined for rejections.

Response to the Remarks:

Examiner believes that those skilled in the art will recognize that references as Wiemeyer, Addy, Hackett, Katz and Lepkofker can be combined for rejections because they are all directed to the field of monitoring & tracking fire condition in the buildings & shelters even they do not mention a term as subsequently. Please refer the rejections above.

### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lemelson et al. (U.S. 6,873,256).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2636

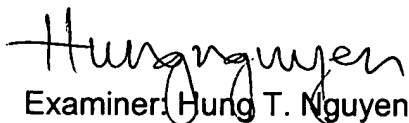
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1. 136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 9:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN**  
**PRIMARY EXAMINER**

  
Examiner: Hung T. Nguyen

Date: Dec. 28, 2005